

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038440; AI 19432; PER20040001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Village of Loreauville
Loreauville Municipal Sewer Treatment Plant
P.O. Box 336
Loreauville, LA 70552
- II. **PREPARED BY:** Jim Bondy
- DATE PREPARED:** December 5, 2005
- III. **PERMIT ACTION:** reissue LPDES permit LA0038440, AI 19432; PER20040001

LPDES application received: August 30, 2004

LPDES permit issued: March 1, 2000
LPDES permit expired: February 28, 2005

IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Village of Loreauville.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at 309 Boutte Road in Loreauville, Iberia Parish.
- D. The treatment facility consists of extended aeration package plants with final clarifiers and sludge drying beds. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 30° 3' 59" North
Longitude 91° 44' 25" West

Description: treated sanitary wastewater

Design Capacity: 0.10 mgd

Type of Flow Measurement which the facility is currently using:

Ultrasonic Flow Meter w/Totalizing Meter and Continuous Recorder

V. RECEIVING WATERS:

The discharge is into local drainage; thence into Bayou Teche in segment 060401 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060401 of the Vermilion - Teche Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 060401 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060401 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy, Water and Waste Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 060401, Bayou Teche – Keystone Locks and Dam to Charenton Canal, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060401 was previously listed as impaired for phosphorus, Nitrogen (Nitrate + Nitrite as N), organic enrichment/low DO, suspended solids/turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for Total Phosphorus will not be placed in this permit.

The following TMDL's have been established for subsegment 060401:

Bayou Teche Watershed TMDL for Dissolved Oxygen including WLAs for Twenty-two Facilities and Addressing Nutrients

The TMDL specifies limitations for CBOD₅, Ammonia-Nitrogen, and Dissolved Oxygen for the Village of Loreauville. CBOD₅ limits are the same as previously permitted. Limits for Ammonia-Nitrogen and Dissolved Oxygen were not included in the previous permit, therefore an interim schedule will be given to allow time to reach compliance with these new limitations.

Bayou Teche TMDL for Fecal Coliform

This TMDL applies to sanitary dischargers only. As per the Bayou Teche Fecal Coliform TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will remain as previously permitted.

The TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed

As per the TMDL, "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as in the previous permit.

TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion Teche River Basins

There are no known point source discharges of Carbofuran in the Mermentau Basin, and therefore no allocation was given to point sources. There is one point source in the Vermilion-Teche (FMC Corp. LA0064360) but they do not discharge Carbofuran. Likewise no allocation was given to point source discharges in the Vermilion-Teche Basin.

The EPA Drafted *MERCURY TMDLS FOR SUBSEGMENTS WITHIN MERMENTAU AND VERMILION-TECHE RIVER BASINS* was final on April 5, 2001 by Federal Register Notice. Some point sources, particularly larger discharges into small water bodies may represent significant site specific (local) sources of mercury and could contribute to mercury bioaccumulation which, individually or collectively, may represent significant sources of mercury. Those large facilities identified as having "reasonable potential" for exceeding narrative and/or numeric standards for protection of human health will be required to monitor mercury in their discharges. Based upon the small size of the facility and its discharge to a large waterbody it is determined that the discharge from the Village of Loreaville Municipal Sewer Treatment Plant does not possess the reasonable potential for exceedence of numeric mercury water quality standards and no effluent limitations or requirements will be placed in the permit at this time.

Interim Effluent Limits:**OUTFALL 001**

Interim effluent limitations are being placed in the permit to allow for the facility to come into compliance with the *Bayou Teche Watershed TMDL for Dissolved Oxygen including WLAs for Twenty-two Facilities and Addressing Nutrients*

Interim limits shall begin the effective date of the permit and expire three (3) years from the effective date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	8.3	10 mg/l	15 mg/l	Interim limits are set in accordance with the <i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i> , and the previous permit.
TSS	12.5	15 mg/l	23 mg/l	Interim limits are set in accordance with the <i>TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed</i> and the previous permit.
Ammonia	Report	Report	Report	<i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i>
Dissolved Oxygen*	N/A	Report	N/A	<i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i>

*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Interim Effluent Limitations:

1) Fecal Coliform

The discharge from this facility is into a water body that has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are set in accordance with the *Bayou Teche TMDL for Fecal Coliform* and the previous permit.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Final Effluent Limits:

OUTFALL 001

Final limits shall become effective three (3) years from the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	8.3	10 mg/l	15 mg/l	Limits are set in accordance with the <i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i> , and the previous permit.
TSS	12.5	15 mg/l	23 mg/l	Limits are set in accordance with the <i>TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed</i> and the previous permit.
Ammonia	8.3	10 mg/l	20 mg/l	<i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i>
Dissolved Oxygen*	N/A	2 mg/l	N/A	<i>Bayou Teche Watershed TMDL for Dissolved Oxygen and including WLA's for Twenty-Two Facilities and Addressing Nutrients</i>

*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are set in accordance with the *Bayou Teche TMDL for Fecal Coliform* and the previous permit.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X.**PREVIOUS PERMITS:**

LPDES Permit LA0038440: Issued: March 1, 2000

Expired: February 28, 2005

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.

XI.**ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates that the following most recent inspection was performed by LDEQ on November 28, 2005. The report noted that several excursions had occurred and that the facility is under a Compliance Order.

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement action administered against this facility:

LDEQ Issuance:

Enforcement Tracking # - WE-CN-01-0101

Date Issued - July 31, 2001

Findings of Fact:

1. A small leak in the clarifier
2. Effluent violations
3. Operation and Maintenance violations
4. Failure to conduct flow measurements
5. Failure to submit noncompliance reports for effluent violations

Order:

1. Take immediate steps necessary to meet and maintain compliance with LPDES permit LA0038440.
2. Submit within 30 days a detailed plan of how compliance will be achieved.
3. Apply for a LCDBG grant for a facility upgrade and to complete the upgrade.

C) DMR Review

A review of the discharge monitoring reports for the period beginning July 1, 2003 through June 30, 2005 has revealed the following violations:

Month	Parameter	DMR Reported Value	Permit Limit
July 2003	Fecal Coliform, Monthly Avg.	>1000 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
August 2003	Fecal Coliform, Monthly Avg.	>1000 colonies/ml	200 colonies/ml
	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
September 2003	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
November 2003	BOD ₅ , Weekly Avg.	18 mg/l	15 mg/l
	TSS, Monthly Avg.	22 mg/l	15 mg/l
	TSS, Weekly Avg.	40 mg/l	23 mg/l
February 2004	BOD ₅ , Monthly Avg.	15 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	18 mg/l	15 mg/l
	BOD ₅ (mass), Monthly Avg.	27.6 lb/day	8.3 lb/day
	TSS, Monthly Avg.	21 mg/l	15 mg/l
	TSS (mass), Monthly Avg.	37.1 lb/day	12.5 lb/day
March 2004	BOD ₅ , Monthly Avg.	26 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	28 mg/l	15 mg/l
	BOD ₅ (mass), Monthly Avg.	19.2 lb/day	8.3 lb/day
	TSS, Monthly Avg.	53 mg/l	15 mg/l
	TSS, Weekly Avg.	58 mg/l	23 mg/l
	TSS (mass), Monthly Avg.	39.2 lb/day	12.5 lb/day
June 2004	TSS, Monthly Avg.	17 mg/l	15 mg/l
	TSS (mass), Monthly Avg.	29.3 lb/day	12.5 lb/day
	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
July 2004	TSS (mass), Monthly Avg.	15.5 lb/day	12.5 lb/day
October 2004	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
February 2005	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml
March 2005	BOD ₅ (mass), Monthly Avg.	13.3 lb/day	8.3 lb/day
	TSS, Monthly Avg.	23 mg/l	15 mg/l
	TSS, Weekly Avg.	33 mg/l	23 mg/l
	TSS (mass), Monthly Avg.	54.7 lb/day	12.5 lb/day
April 2005	Fecal Coliform, Weekly Avg.	>1000 colonies/ml	400 colonies/ml

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.10 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.10 \text{ MGD} \times 10 \text{ mg/l} = 8.3 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

XIII TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Village of Loreauville, Loreauville Municipal Sewer Treatment Plant, August 30, 2004.